



# Cisco Unity Networking Options Requirements (Cisco Unity Version 4.x and Earlier)

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This document describes version and compatibility requirements for installing additional Cisco Unity servers, and for adding or combining networking options on a Cisco Unity system.

The information in this document is applicable to Cisco Unity versions 4.x and earlier. For information applicable to Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).

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## Digital Networking Requirements

This section contains Digital Networking requirements for Cisco Unity with IBM Lotus Domino and Cisco Unity with Microsoft Exchange. See the applicable subsection:

- [Digital Networking Requirements for Cisco Unity with Domino, page 2](#)
- [Digital Networking Requirements for Cisco Unity with Exchange, page 2](#)



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Note that Digital Networking between Cisco Unity with Exchange and Cisco Unity with Domino is not supported.

## Digital Networking Requirements for Cisco Unity with Domino

Digital Networking allows messaging among multiple Cisco Unity servers that access the same subscriber directory. The directory (or address book) in which Cisco Unity stores data and from which subscribers and distribution lists are imported is specified in the Message Store Configuration wizard when each Cisco Unity server is set up. Typically, Names.nsf is specified during setup unless you use a different name for your Domino domain directory. By default, the directory that was specified in the Message Store Configuration wizard is monitored by each Cisco Unity server for data from other Cisco Unity servers.

Beginning with Cisco Unity 4.0(5), if any or all of the Cisco Unity servers that will be set up for Digital Networking use a different directory (or a secondary subscriber address book), every Cisco Unity server will need to be configured to monitor the applicable directories on every other server, as described in the “Managing Monitored Address Books” section in the “Digital Networking” chapter of the applicable *Networking Guide for Cisco Unity*, at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_feature\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html).

Note that the Interop Gateway is not used in Digital Networking.

## Version Requirements for Digital Networking in Cisco Unity with Domino

The following list shows the Cisco Unity version combinations that are supported for networked Cisco Unity servers:

- 7.0(2), 5.0(1), 4.2(1), 4.1(1), 4.0(5)
- 4.2(1), 4.1(1), 4.0(5), 4.0(4), 4.0(3), 4.0(2), 4.0(1)

Note the following considerations when networking multiple versions of Cisco Unity:

- When a feature is introduced in a particular Cisco Unity version, all Cisco Unity servers must be upgraded in order to use the feature.
- If a Cisco Unity 4.0(5) or later server has been configured for AMIS, Bridge, or VPIM networking, then all the networked Cisco Unity servers must be at version 4.0(5) or later.
- Digital Networking between Cisco Unity with Domino and Cisco Unity with Exchange is not supported.
- For additional information applicable to Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).

## Digital Networking Requirements for Cisco Unity with Exchange

Digital Networking allows messaging among multiple Cisco Unity servers that access the same subscriber directory. To use Digital Networking, the partner Exchange servers must be in one of the following configurations:

- The same Active Directory forest.
- The same Exchange 5.5 site.

- Different sites within the same Exchange 5.5 organization, but with Exchange message and directory replication connectors installed. (Without the message and directory replication connectors, Digital Networking does not work.)

When Cisco Unity subscriber mailboxes are homed in Exchange 5.5 and in Exchange 2000 and/or Exchange 2003, all Cisco Unity servers must use Exchange 2000 or (for Cisco Unity 4.0(3) or later) Exchange 2003 as the partner server. Digital Networking is not supported between a Cisco Unity server with a partner Exchange 5.5 server and a Cisco Unity server with a partner Exchange 2000 or Exchange 2003 server.

**Note**

Beginning with Cisco Unity 4.2(1), we no longer support using Exchange 5.5 as a message store for Cisco Unity voice messages or as a partner Exchange server. If you are using Digital Networking to connect a Cisco Unity 4.2(1) or later server with a server running an earlier version of Cisco Unity, in order for Digital Networking to continue to work for all Cisco Unity servers, you must upgrade or change the partner Exchange server for each Cisco Unity server to an Exchange 2003 (for Cisco Unity 4.0(3) or later) or Exchange 2000 server. Beginning with Cisco Unity 5.0(1), you can also upgrade or change the partner Exchange server to an Exchange 2007 server.

Note that the Voice Connector is not used in Digital Networking.

See the following sections:

- [Version Requirements for Digital Networking in Cisco Unity with Exchange, page 3](#)
- [Active Directory Schema Extensions Required for Digital Networking, page 4](#)

## Version Requirements for Digital Networking in Cisco Unity with Exchange

The following list shows the Cisco Unity version combinations that are supported for networked Cisco Unity servers:

- 7.0(2), 5.0(1), 4.2(1), 4.1(1), 4.0(5)
- 4.2(1), 4.1(1), 4.0(5), 4.0(4), 4.0(3), 4.0(2), 4.0(1)
- 4.0(5), 4.0(4), 4.0(3), 4.0(2), 4.0(1), 3.1(6), 3.1(5), 3.1(4), 3.1(3), 3.1(2)
- 3.1(1) (only with other 3.1(1) servers)



**Note** Cisco Unity versions 3.1(x) are no longer supported. Information about these versions is provided for historical purposes only.

Note the following considerations when networking multiple versions of Cisco Unity:

- When a feature is introduced in a particular Cisco Unity version, all Cisco Unity servers must be upgraded in order to use the feature.
- If a Cisco Unity 4.0(3) or later server has been configured for networking with the Cisco Unity Bridge 3.x, then all the networked Cisco Unity servers must be at version 4.0(3) or later.
- Digital Networking between Cisco Unity with Exchange and Cisco Unity with Domino is not supported.
- For additional information applicable to Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).

## Active Directory Schema Extensions Required for Digital Networking

The Active Directory schema extensions needed for Digital Networking are included in the set of core schema extensions required by Cisco Unity itself. The LDIF script file Avdirmonex2k.ldf contains the core Cisco Unity schema extensions and is located on Cisco Unity DVD 1 and CD 1 in the Schema\LdifScripts directory. When networking servers that are running different versions of Cisco Unity, the Active Directory schema extensions for the latest version should be applied.

Note that the schema occasionally changes with a new Cisco Unity release. For information on whether the schema changed for your version of Cisco Unity and on applying schema extensions, see the “[About Extending the Active Directory Schema for Cisco Unity with Exchange](#)” section on page 15.

## AMIS Networking Requirements

This section contains AMIS Networking requirements for Cisco Unity with IBM Lotus Domino and Cisco Unity with Microsoft Exchange. See the applicable subsection:

- [AMIS Networking Requirements for Cisco Unity with Domino, page 4](#)
- [AMIS Networking Requirements for Cisco Unity with Exchange, page 4](#)

## AMIS Networking Requirements for Cisco Unity with Domino

AMIS Networking allows messaging between Cisco Unity and other voice messaging systems that support the Audio Messaging Interchange Specification analog (AMIS-a) protocol.

For a list of voice messaging systems supported for AMIS Networking, see the “Support Policy for AMIS Voice Messaging Systems” section of the applicable *Cisco Unity Supported Hardware and Software, and Support Policies* document, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html).

## Version Requirements for AMIS Networking in Cisco Unity with Domino

The Cisco Unity bridgehead server set up for AMIS Networking must be version 4.0(5) or later. Additionally, all digitally networked Cisco Unity servers must be at version 4.0(5) or later to send and receive messages to the remote voice messaging system via AMIS.

The Interop Gateway for Domino is a Cisco Unity component that enables messaging between Cisco Unity and other voice messaging systems. The Interop Gateway does the same tasks as the Cisco Unity Voice Connector for Microsoft Exchange does for Cisco Unity with Exchange systems. Unlike the Voice Connector (which is installed on an Exchange server), the Interop Gateway is a service that runs on the Cisco Unity server and is not available separately from the rest of Cisco Unity.

## AMIS Networking Requirements for Cisco Unity with Exchange

AMIS Networking allows messaging between Cisco Unity and other voice messaging systems that support the Audio Messaging Interchange Specification analog (AMIS-a) protocol.

See the following sections:

- [Version Requirements for AMIS Networking in Cisco Unity with Exchange, page 5](#)
- [Active Directory Schema Extensions Required for AMIS Networking, page 6](#)

For a list of voice messaging systems supported for AMIS Networking, see the “Support Policy for AMIS Voice Messaging Systems” section of the applicable *Cisco Unity Supported Hardware and Software, and Support Policies* document, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html).

## Version Requirements for AMIS Networking in Cisco Unity with Exchange

The Cisco Unity bridgehead server set up for AMIS Networking must be version 3.1(2) or later.



### Caution

Beginning with Cisco Unity 4.2(1), we no longer support using Exchange 5.5 as a message store for Cisco Unity voice messages or as a partner Exchange server. If you are using Exchange 5.5 as the partner Exchange server and upgrading Cisco Unity to 4.2(1) or later, you must upgrade or change the partner Exchange server to an Exchange 2003 or Exchange 2000 server, uninstall the Voice Connector for Exchange 5.5, and install the Voice Connector for Exchange 2003/2000. Beginning with Cisco Unity 5.0(1), you can also upgrade or change the partner Exchange server to an Exchange 2007 server. However, you must install the Voice Connector on an Exchange 2003 or Exchange 2000 server. Installing the Voice Connector on an Exchange 2007 server is not supported.

**Table 1** lists the version combinations of the Cisco Unity bridgehead server and the Voice Connector that are supported for AMIS Networking.



### Note

Cisco Unity bridgehead server versions 3.1(x) are no longer supported. Information about these versions is provided for historical purposes only.



### Note

We recommend that you always install the version of the Voice Connector that ships with your version of Cisco Unity, or a later version, in order to take advantage of new features or defect fixes.

**Table 1** Supported Version Combinations for AMIS Networking in Cisco Unity with Exchange

Cisco Unity Bridgehead Server	Voice Connector for Exchange 2000	Voice Connector for Exchange 5.5
4.2(1)	12.0(1), 11.0(3), 11.0(2), 11.0(1)	Not supported
4.1(1)	12.0(1), 11.0(3), 11.0(2), 11.0(1)	11.0(3), 11.0(2), 11.0(1)
4.0(5)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(4)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(3)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(2)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(1)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
3.1(6)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
3.1(5)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1), 3.1(5)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1), 3.1(5)

**Table 1 Supported Version Combinations for AMIS Networking in Cisco Unity with Exchange (continued)**

Cisco Unity Bridgehead Server	Voice Connector for Exchange 2000	Voice Connector for Exchange 5.5
3.1(4)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1), 3.1(4)	1.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1), 3.1(4)
3.1(3)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1), 3.1(3)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1), 3.1(3)
3.1(2)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1), 3.1(2)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1) 3.1(2)

## Active Directory Schema Extensions Required for AMIS Networking

The Active Directory schema extensions needed for AMIS Networking using Voice Connector for Exchange 2000 version 10.0(1) and later are included in the set of core schema extensions required by Cisco Unity itself. The LDIF script file Avdirmonex2k.ldf contains the core Cisco Unity schema extensions and is located on Cisco Unity DVD 1 and CD 1 in the Schema\LdifScripts directory.

The Voice Connector for Exchange 2000 that shipped with Cisco Unity 3.1(2) through 3.1(5) requires additional schema extensions. However, you can install Voice Connector 10.0(1) or later and avoid extending the schema for the Voice Connector. (The Voice Connector schema modifications are in the file Voicegateway.ldf, which is located on Cisco Unity DVD 1 and CD 1 in the directory Schema\LdifScripts.)

Note that the schema occasionally changes with a new Cisco Unity release. For information on whether the schema changed for your version of Cisco Unity and on applying schema extensions, see the [“About Extending the Active Directory Schema for Cisco Unity with Exchange”](#) section on page 15.

## Bridge Networking Requirements

This section contains Bridge Networking requirements for Cisco Unity with IBM Lotus Domino and Cisco Unity with Microsoft Exchange. See the applicable subsection:

- [Bridge Networking Requirements for Cisco Unity with Domino, page 6](#)
- [Bridge Networking Requirements for Cisco Unity with Exchange, page 7](#)

## Bridge Networking Requirements for Cisco Unity with Domino

Bridge Networking allows messaging between Cisco Unity and Avaya voice messaging systems on an Octel analog network by using the Cisco Unity Bridge. For a list of voice messaging systems supported for Bridge Networking, see the “Supported Voice Messaging Systems” section of the applicable *Cisco Unity Bridge System Requirements, and Supported Hardware and Software* at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html).

The Interop Gateway for Domino is a Cisco Unity component that enables messaging between Cisco Unity and other voice messaging systems. The Interop Gateway does the same tasks as the Cisco Unity Voice Connector for Microsoft Exchange does for Cisco Unity with Exchange systems. Unlike the Voice Connector (which is installed on an Exchange server), the Interop Gateway is a service that runs on the Cisco Unity server and is not available separately from the rest of Cisco Unity.

## Version Requirements for Bridge Networking in Cisco Unity with Domino

The Cisco Unity bridgehead server that is configured for Bridge Networking must be version 4.0(5) or later. Note that when a Cisco Unity 4.0(5) or later server has been configured for networking with the Cisco Unity Bridge, then all digitally networked Cisco Unity servers must be at version 4.0(5) or later. (For additional information applicable to Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).)

Table 2 lists the version combinations of the Cisco Unity bridgehead server and the version of the Cisco Unity Bridge that are supported for Bridge Networking.

**Table 2** Supported Version Combinations for Bridge Networking in Cisco Unity with Domino

Cisco Unity Bridgehead Server	Bridge Server
4.2(1)	3.1(1), 3.0(6), 3.0(5)
4.1(1)	3.1(1), 3.0(6), 3.0(5)
4.0(5)	3.1(1), 3.0(6), 3.0(5)

## Bridge Networking Requirements for Cisco Unity with Exchange

Bridge Networking allows messaging between Cisco Unity and Avaya voice messaging systems on an Octel analog network by using the Cisco Unity Bridge. Bridge Networking is supported in the following configurations:

- All Cisco Unity subscriber mailboxes are homed in Exchange 2000. Beginning with Cisco Unity 4.0(3), mailboxes can also be homed in Exchange 2003. Beginning with Cisco Unity 5.0(1), mailboxes can also be homed in Exchange 2007.
- Exchange servers are running Exchange 5.5 and running Exchange 2000 and/or Exchange 2003. In this configuration, all partner Exchange servers must be running Exchange 2000 or Exchange 2003.

Only the Voice Connector for Exchange 2000 is supported for use with Bridge Networking. Note that versions 11.0(1) and later of the Voice Connector for Exchange 2000 can be installed on either an Exchange 2000 or Exchange 2003 server.



### Caution

Installing the Voice Connector on an Exchange 2007 server is not supported.

See the following sections:

- [Version Requirements for Bridge Networking in Cisco Unity with Exchange, page 8](#)
- [Active Directory Schema Extensions Required for Bridge Networking, page 8](#)

For a list of voice messaging systems supported for Bridge Networking, see the “Supported Voice Messaging Systems” section of the applicable *Cisco Unity Bridge System Requirements, and Supported Hardware and Software* at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html).

## Version Requirements for Bridge Networking in Cisco Unity with Exchange

The Cisco Unity bridgehead server that is configured for Bridge Networking must be version 3.1(3) or later. Note that when a Cisco Unity 4.0(3) or later server has been configured for networking with the Cisco Unity Bridge, then all networked Cisco Unity servers must be at version 4.0(3) or later. (For additional information applicable to Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).)

Table 3 lists the version combinations of the Cisco Unity bridgehead server, the Voice Connector, and the Cisco Unity Bridge software on the Bridge server that are supported for Bridge Networking.



**Note**

Cisco Unity bridgehead server versions 3.1(x) are no longer supported. Information about these versions is provided for historical purposes only.



**Note**

We recommend that you always install the version of the Voice Connector that ships with your version of Cisco Unity, or a later version, in order to take advantage of new features or defect fixes.

**Table 3** Supported Version Combinations for Bridge Networking in Cisco Unity with Exchange

Cisco Unity Bridgehead Server	Voice Connector for Exchange 2000	Bridge Server <sup>1</sup>
4.2(1)	11.0(3)	3.1(1), 3.0(6), 3.0(5), 3.0(4), 3.0(3), 3.0(2), 3.0(1)
4.1(1)	11.0(3)	3.1(1), 3.0(6), 3.0(5), 3.0(4), 3.0(3), 3.0(2), 3.0(1)
4.0(5)	11.0(3)	3.1(1), 3.0(6), 3.0(5), 3.0(4), 3.0(3), 3.0(2), 3.0(1)
4.0(4)	11.0(3), 11.0(2), 11.0(1)	3.1(1), 3.0(6), 3.0(5), 3.0(4), 3.0(3), 3.0(2), 3.0(1)
4.0(3)	11.0(3), 11.0(2), 11.0(1)	3.1(1), 3.0(6), 3.0(5), 3.0(4), 3.0(3), 3.0(2), 3.0(1)
4.0(2)	10.0(2), 10.0(1)	2.1(4), 2.1(2), 2.1(1), 2.0(1)
4.0(1)	10.0(2), 10.0(1)	2.1(4), 2.1(2), 2.1(1), 2.0(1)
3.1(6)	10.0(2), 10.0(1)	2.1(4), 2.1(2), 2.1(1), 2.0(1)
3.1(5)	10.0(2), 10.0(1), 3.1(5)	2.1(4), 2.1(2), 2.1(1), 2.0(1)
3.1(4)	10.0(2), 10.0(1), 3.1(4)	2.1(4), 2.1(2), 2.1(1), 2.0(1)
3.1(3)	10.0(2), 10.0(1), 3.1(3)	2.1(4), 2.1(2), 2.1(1), 2.0(1)

1. The Bridge version skipped from 2.1(2) to 2.1(4). There is no version 2.1(3).

## Active Directory Schema Extensions Required for Bridge Networking

To support Bridge Networking, the Active Directory schema must be further extended. The schema modifications to support Bridge Networking are in the file Omnigateway.ldf, which is located on Cisco Unity DVD 1 and CD 1 in the directory SchemaLdifScripts. If you are setting up Bridge Networking, or if you have Bridge Networking set up for a previous version of Cisco Unity and are upgrading Cisco Unity, you must apply the schema extensions that apply to the latest version of Cisco Unity in the Active Directory forest. For information on whether Omnigateway.ldf changed for your version of Cisco Unity and on applying schema extensions, see the “About Extending the Active Directory Schema for Cisco Unity with Exchange” section on page 15.

The Voice Connector for Exchange 2000 that shipped with Cisco Unity 3.1(3) through 3.1(5) requires additional schema extensions. However, you can install Voice Connector 10.0(1) or later and avoid extending the schema for the Voice Connector. (The Voice Connector schema modifications are in the file `Voicegateway.ldf`, which is located on Cisco Unity DVD 1 and CD 1 in the directory `Schema\LdifScripts`.)

## VPIM Networking Requirements

This section contains VPIM Networking requirements for Cisco Unity with IBM Lotus Domino and Cisco Unity with Microsoft Exchange. See the applicable subsection:

- [VPIM Voice Messaging System Interoperability, page 9](#)
- [VPIM Networking Requirements for Cisco Unity with Domino, page 9](#)
- [VPIM Networking Requirements for Cisco Unity with Exchange, page 10](#)

## VPIM Voice Messaging System Interoperability

VPIM Networking can be used to provide voice-mail message networking between the following types of voice messaging systems:

- Cisco Unity with Exchange and Cisco Unity with Domino
- Cisco Unity with Domino 4.0(5) and later and Cisco Unity Express 2.1(2) and later
- Cisco Unity with Exchange 4.0(4) and later and Cisco Unity Express 2.1(1) and later
- Cisco Unity and third-party voice messaging systems that support the Voice Profile for Internet Mail (VPIM) version 2 protocol

For the support policy for third-party VPIM voice messaging systems, see the “Support Policy for VPIM Voice Messaging Systems” section of the applicable *Cisco Unity Supported Hardware and Software, and Support Policies* document, at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html).

## VPIM Networking Requirements for Cisco Unity with Domino

VPIM Networking allows messaging between Cisco Unity and other voice messaging systems that support the Voice Profile for Internet Mail (VPIM) version 2 protocol.

### Version Requirements for VPIM Networking in Cisco Unity with Domino

The Cisco Unity bridgehead server that is configured for VPIM Networking must be version 4.0(5) or later. Note that when a Cisco Unity 4.0(5) or later server has been configured for VPIM Networking, then all digitally networked Cisco Unity servers must be at version 4.0(5) or later. (For additional information applicable to Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).)

The Interop Gateway for Domino is a Cisco Unity component that enables messaging between Cisco Unity and other voice messaging systems. The Interop Gateway does the same tasks as the Cisco Unity Voice Connector for Microsoft Exchange does for Cisco Unity with Exchange systems. Unlike the Voice Connector (which is installed on an Exchange server), the Interop Gateway is a service that runs on the Cisco Unity server and is not available separately from the rest of Cisco Unity.

## VPIM Networking Requirements for Cisco Unity with Exchange

VPIM Networking allows messaging between Cisco Unity and other voice messaging systems that support the Voice Profile for Internet Mail (VPIM) version 2 protocol. VPIM Networking is supported in the following configurations:

- All Cisco Unity subscriber mailboxes are homed in Exchange 2000. Beginning with Cisco Unity 4.0(3), mailboxes can also be homed in Exchange 2003. Beginning with Cisco Unity 5.0(1), mailboxes can also be homed in Exchange 2007.
- Exchange servers are running Exchange 5.5 and running Exchange 2000 and/or Exchange 2003. In this configuration, all partner Exchange servers must be running Exchange 2000 or Exchange 2003.

Only the Voice Connector for Exchange 2000 is supported for use with VPIM Networking. Note that versions 11.0(1) and later of the Voice Connector for Exchange 2000 can be installed on either an Exchange 2000 or Exchange 2003 server.



### Caution

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Installing the Voice Connector on an Exchange 2007 server is not supported.

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See the following sections:

- [Version Requirements for VPIM Networking in Cisco Unity with Exchange, page 10](#)
- [Active Directory Schema Extensions Required for VPIM Networking, page 11](#)

## Version Requirements for VPIM Networking in Cisco Unity with Exchange

The Cisco Unity bridgehead server set up for VPIM Networking must be version 4.0(1) or later. Note, however, that if multiple Cisco Unity servers are networked together and using Digital Networking, only the bridgehead server must be running 4.0(1) or later. (For additional information applicable to Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).)

Table 4 lists the version combinations of the Cisco Unity bridgehead server and the Voice Connector that are supported for VPIM Networking.



### Note

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We recommend that you always install the version of the Voice Connector that ships with your version of Cisco Unity, or a later version, in order to take advantage of new features or defect fixes.

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**Table 4** Supported Version Combinations for VPIM Networking in Cisco Unity with Exchange

Cisco Unity Bridgehead Server	Voice Connector for Exchange 2000
4.2(1)	12.0(1), 11.0(3)
4.1(1)	12.0(1), 11.0(3)
4.0(5)	12.0(1), 11.0(3)
4.0(4)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(3)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(2)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(1)	12.0(1), 11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)

## Active Directory Schema Extensions Required for VPIM Networking

To support VPIM Networking, the Active Directory schema must be further extended. The schema modifications to support VPIM Networking are in the file Vpimgateway.ldf, which is located on Cisco Unity DVD 1 and CD 1 in the directory Schema\LdifScripts.

Note that the schema occasionally changes with a new Cisco Unity release. For information on whether the schema changed for your version of Cisco Unity and on applying schema extensions, see the [“About Extending the Active Directory Schema for Cisco Unity with Exchange”](#) section on page 15.

# SMTP Networking Requirements for Cisco Unity with Exchange


**Note**

If the Cisco Unity system is using IBM Lotus Domino as the message store, this section does not apply.


**Note**

Beginning with Cisco Unity 5.0(1), SMTP Networking is no longer supported. Therefore, if a 4.x server is digitally networked with a 5.0(1) or later server, SMTP Networking is not supported. In that case, we recommend that you use VPIM Networking instead. For information about requirements for VPIM Networking, see the [“VPIM Networking Requirements”](#) section on page 9.

SMTP Networking allows messaging among Cisco Unity servers that access separate directories. You use SMTP Networking when the Exchange partner servers are in separate Active Directory forests or separate Exchange 5.5 organizations.

SMTP Networking between Cisco Unity with Microsoft Exchange and Cisco Unity with IBM Lotus Domino is not supported.

See the following sections:

- [Version Requirements for SMTP Networking in Cisco Unity with Exchange](#), page 12
- [Active Directory Schema Extensions Required for SMTP Networking](#), page 13

## Version Requirements for SMTP Networking in Cisco Unity with Exchange

If multiple Cisco Unity servers (version 3.1(2) or later) are networked together and using Digital Networking, the Cisco Unity bridgehead server set up for SMTP Networking must be version 3.1(5) or later with Voice Connector 10.0(1) or later.

Support for SMTP Networking depends on the version of Cisco Unity. [Table 5](#) lists the version combinations of the Cisco Unity bridgehead server and the Voice Connector that are supported for SMTP Networking.

Note that SMTP Networking between Cisco Unity 2.4(6), and Cisco Unity 3.1(5) and later does not work and is not supported. The SMTP message format used in Cisco Unity 3.1(5) and later (with Voice Connector 10.0(1) and later) is different from the format used in Cisco Unity 2.4(6).



**Note** Cisco Unity versions 3.1(x) are no longer supported. Information about these versions is provided for historical purposes only.



**Note** Beginning with Cisco Unity 4.2(1), we no longer support using Exchange 5.5 as a message store for Cisco Unity voice messages or as a partner Exchange server. If you are using Exchange 5.5 as the partner Exchange server and upgrading Cisco Unity to 4.2(1) or later, you must upgrade or change the partner Exchange server to an Exchange 2003 (Cisco Unity 4.0(3) or later only) or Exchange 2000 server, uninstall the Voice Connector for Exchange 5.5, and install the Voice Connector for Exchange 2003/2000.



**Note** We recommend that you always install the version of the Voice Connector that ships with your version of Cisco Unity, or a later version, in order to take advantage of new features or defect fixes.

**Table 5 Supported Version Combinations for SMTP Networking in Cisco Unity with Exchange**

Cisco Unity Bridgehead Server	Voice Connector for Exchange 2000	Voice Connector for Exchange 5.5
4.2(1)	11.0(3), 11.0(2), 11.0(1)	Not supported
4.1(1)	11.0(3), 11.0(2), 11.0(1)	11.0(3), 11.0(2), 11.0(1)
4.0(5)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(4)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(3)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(2)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
4.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
3.1(6)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
3.1(5) <sup>1</sup>	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)	11.0(3), 11.0(2), 11.0(1), 10.0(2), 10.0(1)
3.1(4)	Not supported	Not supported
3.1(3)	Not supported	Not supported
3.1(2)	Not supported	Not supported
3.1(1)	Not supported	Not supported

1. Cisco Unity 3.1(5) did not ship with the required Voice Connector version. For SMTP Networking with Cisco Unity 3.1(5), you must download Voice Connector 10.0(1) or later from the Cisco Unity Voice Connector for Exchange Software Download page at <http://www.cisco.com/cgi-bin/tablebuild.pl/unity-voice-connector>.

## Active Directory Schema Extensions Required for SMTP Networking

The Active Directory schema extensions needed for SMTP Networking using Voice Connector for Exchange 2000 version 10.0(1) through version 11.0(3) are included in the set of core schema extensions required by Cisco Unity itself. The LDIF script file Avdirmonex2k.ldf contains the core Cisco Unity schema extensions and is located on Cisco Unity DVD 1 and CD 1 in the Schema\LdifScripts directory.

Note that the schema occasionally changes with a new Cisco Unity release. For information on whether the schema changed for your version of Cisco Unity and on applying schema extensions, see the “[About Extending the Active Directory Schema for Cisco Unity with Exchange](#)” section on page 15.

# Cisco Unity Voice Connector for Microsoft Exchange Versions



### Note

If the Cisco Unity system is using IBM Lotus Domino as the message store, this section does not apply.

The Cisco Unity Voice Connector for Microsoft Exchange is a Cisco Unity networking component that enables messaging between Cisco Unity servers that access separate directories, and between Cisco Unity servers and other voice messaging systems. The Voice Connector is used with the AMIS, Bridge, SMTP, and VPIM networking options.

The version of the Voice Connector that you use depends on your Exchange network:

- Voice Connector for Exchange 2000—Install this version when your network consists only of Exchange 2000 or later servers, or a mixed-mode environment with Exchange 2000 or Exchange 2003 servers and Exchange 5.5 servers.



### Caution

Installing the Voice Connector for Exchange 2000 on an Exchange 2007 server is not supported.

- Voice Connector for Exchange 5.5.—Install this version when your network consists only of Exchange 5.5 servers. (This version is available for Voice Connector version 11.0(3) and earlier only.)



### Note

The Voice Connector for Exchange 2000 version 11.0(1) and later can be installed on either an Exchange 2000 or Exchange 2003 server. Earlier versions of the Voice Connector are not supported for installation on an Exchange 2003 server.



### Note

Beginning with Cisco Unity 4.2(1), we no longer support using Exchange 5.5 as a message store for Cisco Unity voice messages or as a partner Exchange server. You must upgrade or change the partner Exchange server to an Exchange 2003 (Cisco Unity 4.0(3) or later only) or Exchange 2000 server, uninstall the Voice Connector for Exchange 5.5, and install the Voice Connector for

Exchange 2003/2000 if you are either using Exchange 5.5 as the partner Exchange server for AMIS Networking and are upgrading Cisco Unity to 4.2(1) or later, or using Exchange 5.5 as the partner Exchange server for SMTP Networking and are upgrading Cisco Unity to 4.2(1).

Only the Voice Connector for Exchange 2000 is supported for use with Bridge and VPIM Networking. The Voice Connector ships with Cisco Unity. For information on downloading the Voice Connector, see the applicable *Release Notes for Cisco Unity Voice Connector for Microsoft Exchange* at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_release_notes_list.html). (Note that as of Cisco Unity version 4.0(1), the Voice Connector version number changed so that it no longer matches the Cisco Unity version.)

Table 6 lists the Voice Connector versions and the Cisco Unity versions that they shipped with.

**Note**

The availability of some networking features may require upgrading Cisco Unity as well as the Voice Connector. Descriptions in the “New and Changed Functionality” sections of *Release Notes for Cisco Unity Voice Connector for Microsoft Exchange* and *Release Notes for Cisco Unity* note when specific versions are required.

**Note**

Cisco Unity versions 3.1(x) and 2.4(6) are no longer supported. Information about these versions is provided for historical purposes only.

**Note**

For information on versions of the Voice Connector after version 12.0(1), see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).

**Table 6** Voice Connector and Cisco Unity Versions

Voice Connector Version	Shipped with Cisco Unity Version
12.0(1)	5.0(1)
11.0(3)	4.2(1), 4.1(1), 4.0(5)
11.0(2)	4.0(4)
11.0(1)	4.0(3)
10.0(2)	4.0(2), 3.1(6)
10.0(1)	4.0(1)
Matches the version of Cisco Unity that it shipped with	2.4(6) through 3.1(5)

## Active Directory Schema Extensions

Voice Connector version 10.0(1) and later does not require additional Active Directory schema extensions beyond the core schema extensions required by Cisco Unity itself. Although the version of ADSchemaSetup.exe that comes with Cisco Unity 3.0(1) through 3.1(5) includes a check box for Voice

Connector schema extensions, you do not need to check the check box when using Voice Connector 10.0(1) or later. In the version of ADSchemaSetup.exe that comes with Cisco Unity 3.1(6), and 4.0(1) and later, the check box for applying the Voice Connector schema extensions has been removed.

**Note**

Cisco Unity versions 3.1(x) and 3.0(x) are no longer supported. Information about these versions is provided for historical purposes only.

## About Extending the Active Directory Schema for Cisco Unity with Exchange

**Note**

If the Cisco Unity system is using IBM Lotus Domino as the message store, this section does not apply.

To extend the Active Directory schema, you run a Cisco Unity utility called ADSchemaSetup.exe. The utility applies the schema extensions specified in the LDIF script files located on Cisco Unity DVD 1 and CD 1 in the directory Schema\LdifScripts.

The user interface for ADSchemaSetup.exe consists of a dialog box with check boxes that correspond to the LDIF script files. [Table 7](#), [Table 8](#), and [Table 9](#) provide a chronology of the schema extension changes in the LDIF script files in Cisco Unity versions up to 4.2(1). [Table 7](#) covers the changes in Avdirmonex2k.ldf (corresponds to the “Directory Monitor” check box); [Table 8](#) covers Omnigateway.ldf (corresponds to the “Bridge Connector” check box); and [Table 9](#) covers Vpimgateway.ldf (corresponds to the “VPIM Connector” check box). (For information on the schema extension changes in Cisco Unity version 5.x and later, see the *Networking Options Requirements for Cisco Unity (Cisco Unity Version 5.x and Later)*, available at

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/unity/compatibility/matrix/cunetoptionsreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/unity/compatibility/matrix/cunetoptionsreqs.html).

The LDIF files have changed between Cisco Unity versions as needed to provide additional features and functionality, as noted.

**Note**

Changes to Active Directory schema extensions are always backward compatible. When using Digital Networking to network different versions of Cisco Unity, always extend the schema by using the latest version of Avdirmonex2k.ldf. In addition, if you are using the Cisco Unity Bridge or VPIM to communicate with other voice-messaging systems, extend the schema by using the latest version of Omnigateway.ldf or VPIMgateway.ldf, respectively.

**Note**

Cisco Unity versions 3.x are no longer supported. Information about these versions is provided for historical purposes only.

**Table 7** Changes to Schema Extensions Required by Cisco Unity

Cisco Unity Versions	Description
4.2(1)	The property set ciscoEcsbuUnityInformation was added to accommodate changes to the Cisco Unity Permissions wizard.

**Table 7** Changes to Schema Extensions Required by Cisco Unity (continued)

Cisco Unity Versions	Description
4.0(1) – 4.1(1)	The following attributes were added: <ul style="list-style-type: none"> <li>ciscoEcsbuUMSystemState attribute to the location object class</li> <li>ciscoEcsbuAlternateDtmfIdsOrder attribute to the user object class.</li> <li>ciscoEcsbuUMSchemaVersion</li> </ul>
3.0(1) – 3.1(6)	The core schema extensions required by Cisco Unity itself, Digital Networking, SMTP Networking, and AMIS Networking.

**Table 8** Changes to Bridge Networking Schema Extensions

Cisco Unity Versions	Description
4.2(1)	The schema extensions for Bridge Networking changed slightly to accommodate changes to the Cisco Unity Permissions wizard.
4.0(3) – 4.1(1)	The schema extensions for Bridge Networking changed significantly in Cisco Unity 4.0(3), and the attribute ciscoEcsbuUMSchemaVersion was added. The ciscoEcsbuDtmfId attribute was not indexed. The following attributes were added to user objects: <ul style="list-style-type: none"> <li>ciscoEcsbuRemoteNodeID</li> <li>ciscoEcsbuLegacyMailbox</li> </ul> The following attributes were added to location objects: <ul style="list-style-type: none"> <li>ciscoEcsbuRemoteMailboxLength</li> <li>ciscoEcsbuRemoteMailboxLength</li> <li>ciscoEcsbuOptionFlags</li> </ul>
4.0(1) – 4.0(2)	The ciscoEcsbuDtmfId attribute was indexed.
3.1(3) – 3.1(6)	The schema extensions required for Bridge Networking.

**Table 9** Changes to VPIM Networking Schema Extensions

Cisco Unity Versions	Description
4.2(1)	The schema extensions for VPIM Networking changed slightly to accommodate changes to the Cisco Unity Permissions wizard.
4.0(3) – 4.1(1)	The attribute ciscoEcsbuUMSchemaVersion was added.
4.0(1) – 4.0(2)	The schema extensions required for VPIM Networking.

For more information about the Active Directory schema extensions required by Cisco Unity, see the applicable *Cisco Unity Data and the Directory* white paper, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_white\\_papers\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_white_papers_list.html).

A procedure for running ADSchemaSetup.exe is included in the *Installation Guide for Cisco Unity*, the *Networking Guide for Cisco Unity*, and the *Networking Guide for Cisco Unity Bridge*. Use the procedures in these guides if you are installing Cisco Unity or configuring networking features for the first time.

If you are upgrading Cisco Unity to a version that requires a schema update, see the *Reconfiguration and Upgrade Guide for Cisco Unity* for information on how and when to update the schema.

All versions of the *Installation Guide for Cisco Unity* and the *Reconfiguration and Upgrade Guide for Cisco Unity* can be found at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html). The *Networking Guide for Cisco Unity* and *Networking Guide for Cisco Unity Bridge* can be found at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_feature\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html).

## Related Documentation

The following documents are available on Cisco.com:

- *Installation Guide for Cisco Unity Bridge*, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html)
- *Networking Guide for Cisco Unity Bridge*, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_feature\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html)
- *Cisco Unity Bridge System Requirements, and Supported Hardware and Software*, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html)
- *Networking Guide for Cisco Unity*, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products\\_feature\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_feature_guides_list.html)
- *Release Notes for Cisco Unity Voice Connector for Microsoft Exchange*, at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_release_notes_list.html)

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